

CSE 990-001: Cyber-Physical Systems Final Project

Assigned: 2015-09-10
Due: proposal - 2015-10-01
presentation - last 3 classes of semester
report - day of final

Project Overview

This is your opportunity to put into practice some of the many concepts we've talked about. The goal is for you to apply CPS techniques and research to your own research problems. Additionally, you will prepare a proposal, paper, and a presentation. This will prepare you to write papers, prepare proposals, and make presentations in the future, something that will likely be a part of your career.

Additionally, this is to be your OWN work. You may not work in teams or groups. However, you can certainly get advice, input, information, help, or anything else from any source you deem appropriate.

Grading

Here is the point breakdown:

10 points - proposal
10 points - presentation
40 points - final report

What will I be looking for

- Proposal
 - adhere to page requirements
 - reasonably challenging problem
 - concise description, easy to understand
- Presentation
 - clarity, clean slides
 - adhere to time limits (not too short or too long)
 - make it obvious to me that you've practiced this at least a few times
- Paper
 - adhere to page limits
 - adhere to formatting requirements (please indicate somewhere on your paper what formatting requirements you followed)
 - easy to understand description of the research problem and your proposed solution
 - good introduction (context, context, context!)
 - sufficient number of citations/sources
 - results are presented clearly (plots, graphs, tables, etc.)

Proposal

Write a one-page description of your proposed project. Include major citations, the gist of your research problem, and some brief explanations about how you will apply CPS techniques to your problem.

Presentation

25 minutes - 20 minutes presentation, 5 minutes questions (conference-style). We will have presentations the last 3 days of class in December.

Paper

The paper should have the following specifications:

- 5 pages minimum and 8 pages maximum (I don't want to read anything longer than that :-)
- Formatted according to whatever major society/organization/club/etc. you generally ascribe to. This could be IEEE, ACM, AIAA, ASM, etc.
- You should have a "sufficient" number of citations and sources. As a general rule, for a highly refereed conference or journal, I would think 20 citations is a **minimum**.